

1 WE CLAIM:

2 1. A method for facilitating performance by a participant in an event that
 3 includes movement along a course, the method comprising:
 4 monitoring a first performance by a first participant in a first event;
 5 accessing a geographic database that includes data that represents features in a
 6 first geographic area;
 7 using the geographic database to match the first performance to a first course
 8 located in the first geographic area;
 9 comparing the first performance of the first participant to a second performance;
 10 and
 11 providing an indication of the comparing to the first participant.

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 13 2. The method of Claim 1 wherein the event is one selected from a group
 14 consisting of: running, bicycling, a road rally, a triathlon, a soap box derby, a dog sled
 15 race, cross-country skiing, sledding, a roller blade race, race walking, rowing, a
 16 steeplechase street luge, adventure racing, snow boarding, rock climbing, and extreme
 17 runs.

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 19 3. The method of Claim 1 wherein the first participant is stationary relative
 20 to the first course and the movement along the course is simulated.

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 22 4. The method of Claim 1 wherein the first participant physically moves
 23 along the first course.

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 25 5. The method of Claim 4 further comprising:
 26 determining positions of the first participant during the first performance.

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 28 6. The method of Claim 5 wherein the positions of the first participant are
 29 determined using a first positioning device.

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7. The method of Claim 6 wherein the first positioning device is selected from a group consisting of: a GPS unit, a DGPS unit, cell phone positioning technology that uses triangulation, cell phone positioning technology that uses time-of-arrival, cell phone positioning technology that uses direction-of arrival, and beacons.

8. The method of Claim 5 wherein the positions of the first participant are transmitted as data wirelessly from a first communications device located with the first participant.

9. The method of Claim 1 wherein the second performance is by a second participant.

10. The method of Claim 9 wherein the second performance is along a second course located in a second geographic area, which is different from the first geographic area.

11. The method of Claim 10 further comprising:
determining positions of the second participant during the second performance.

12. The method of Claim 11 wherein the positions of the second participant are determined using a second positioning device.

13. The method of Claim 12 wherein the second positioning device is selected from a group consisting of: a GPS unit, a DGPS unit, cell phone positioning technology that uses triangulation, cell phone positioning technology that uses time-of-arrival, cell phone positioning technology that uses direction-of arrival, and beacons.

- 1 14. The method of Claim 11 wherein the positions of the second participant
2 are transmitted as data wirelessly from a second communications device located with the
3 second participant.
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- 5 15. The method of Claim 9 wherein the second performance is along the first
6 course, but occurred at a previous time.
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- 8 16. The method of Claim 1 wherein the second performance is by the first
9 participant along the first course, but occurred at a previous time.
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- 11 17. The method of Claim 1 wherein the second performance is along a second
12 course located in a second geographic area, which is different from the first geographic
13 area, and further wherein the second performance is by the first participant, but occurred
14 at a previous time.
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- 16 18. The method of Claim 1 wherein the indication is provided to the first
17 participant during the event.
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- 19 19. The method of Claim 1 wherein the indication is provided to the first
20 participant during the event via a wireless communications device.
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- 22 20. The method of Claim 1 wherein the first participant is stationary relative
23 to the first course and the movement along the course is simulated by a machine
24 connected directly to a program that compares the first performance the second
25 performance and provides the indication to the first participant.
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- 27 21. A system comprising:
28 a monitoring means that monitors a first user's performance in an event that
29 involves movement along a first course and provides an output indicative thereof;

1 a geographic database that includes data that represents features in a first
2 geographic area that includes the first course; and
3 a competition comparison and equivalency program that receives the output from
4 the monitoring means and provides the first user with an indication that compares the first
5 user's performance to a second performance.

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7 22. The system of Claim 21 wherein the first user's performance is monitored
8 by a stationary machine that simulates movement along the first course.

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10 23. The system of Claim 21 wherein the first user's performance is monitored
11 by a positioning unit that determines positions of the first user in the first geographic area
12 while the first user is moving along the first course in the first geographic area.

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